

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L29	10	((("6,569,705") or ("20020036931") or ("6,531,373") or ("20030122166") or ("20030073295")).PN.	US-PGPUB; USPAT; DERWENT	OR	OFF	2006/10/15 14:09
L34	1	("20020074658").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/10/15 14:15
L36	15	((("5,166,758") or ("5,296,716") or ("5,414,271") or ("5,359,205") or ("5,341,328") or ("5,536,947") or ("5,534,712") or ("5,687,112") or ("5,825,046")).PN.	US-PGPUB; USPAT; DERWENT	OR	OFF	2006/10/15 14:26
L37	521	"5,166,758" "5,296,716" "5,414,271" "5,359,205" "5,341,328" "5,536,947" "5,534,712" "5,687,112" "5,825,046"	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/10/15 14:35
L38	85	sandwich\$3 with chalcogenide	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/10/15 14:36
L39	40	sandwich\$3 with chalcogenide same memory	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/10/15 14:36
L40	73	"5166758"	US-PGPUB	OR	OFF	2006/10/15 14:48
L41	72	"5166758" and phase	US-PGPUB	OR	OFF	2006/10/15 14:48
L42	126	"5166758" and (phase-change phase adj change) adj material	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L43	9	((("6225142") or ("6189582") or ("5914893") or ("5933365") or ("6316784") or ("4203123") or ("6605821") or ("6867425") or ("20040178403")).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/10/15 14:48
L44	241	chalcogenide with memory and trench	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L45	3	((("6225142") or ("6189582") or ("6867425")).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/10/15 14:48
L46	3	L45 and trench and electrode	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48

## EAST Search History

L47	193	chalcogenide with memory and trench AND @PD>"20021031"	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L48	162	L47 AND ELECTRODE	US-PGPUB; USPAT	OR	ON	2006/10/15 14:48
L49	2314	((257/2,3,4,5,310,311,484) or (365/105)).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/10/15 14:48
L50	1527	((257/2,3,4,5,310,311,484) or (365/105)).CCLS. and (trench via hole depression)	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L51	235	((257/2,3,4,5,310,311,484) or (365/105)).CCLS. and (trench via hole depression) and chalcogenide	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L52	12	"4181913"	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L53	5	"4181913" and PHASE	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L54	22	Tsukada and chalcogenide	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L55	460	"3,271,591" "3,611,063" "3,343,034" "3,619,732" "3,571,669" "3,656,032" "3,571,670" "3,846,767" "3,571,671" "3,875,566" "3,571,672" "3,886,577" "3,588,638" "3,980,505"	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L56	61	L55 and trench	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L57	8	"276273".ap.	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L58	8	((("6031287") or ("6307264") or ("6064084") or ("6258707") or ("6423621") or ("5414271") or ("5687112") or ("5714768"))).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/10/15 14:48
L59	604	(257/2,3,4,5).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/10/15 14:48
L60	8	"3440588"	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L61	15	"6087689"	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L62	3845109	forming	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	OFF	2006/10/15 14:48

## EAST Search History

L63	80834	forming with electrodes	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	OFF	2006/10/15 14:48
L64	493	L63 and chalcogenide	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L65	2110	forming with electrodes with (simultaneous simultaneously)	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	OFF	2006/10/15 14:48
L66	3	L65 and chalcogenide	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L67	439	L65 and memory	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L68	11	forming with (multiple near4 electrodes) with (simultaneous simultaneously)	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	OFF	2006/10/15 14:48
L69	114	forming with (TWO near4 electrodes) with (simultaneous simultaneously)	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	OFF	2006/10/15 14:48
L70	61328	(forming FORMED MAKING MADE PATTERNING PATTERNED) NEAR (simultaneous simultaneously)	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	OFF	2006/10/15 14:48
L71	3187	L70 WITH ELECTRODES	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	OFF	2006/10/15 14:48
L72	30	HEON NEAR2 CHANG	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	OFF	2006/10/15 14:48
L73	11	HEON WITH YONG WITH CHANG	US-PGPUB; USPAT; EPO; IBM_TDB	OR	OFF	2006/10/15 14:48

## EAST Search History

L74	147	PHASE-CHANGE WITH MEMORY AND LOWREY	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	OFF	2006/10/15 14:48
L75	50	PHASE-CHANGE AND LOWREY AND TRENCH	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	ON	2006/10/15 14:48
L76	105	(PHASE-CHANGE OR MEMORY ADJ MATERIAL OR CHALCOGENIDE) AND LOWREY AND TRENCH	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	ON	2006/10/15 14:48
L77	10	((("5,296,716") or ("5,414,271") or ("5,359,205") or ("5,534,712") or ("5,341,328") or ("5,406,509") or ("5,534,711") or ("5,536,947") or ("5,687,112") or ("5,933,365"))).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/10/15 14:48
L78	126	(PHASE-CHANGE OR MEMORY ADJ MATERIAL OR CHALCOGENIDE) AND ENERGY ADJ CONVERSION AND TRENCH	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	ON	2006/10/15 14:48
L79	87	"6031287" and electrode	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	OFF	2006/10/15 14:48
L80	86	"6031287" and electrode	US-PGPUB; USPAT; EPO; IBM_TDB	OR	OFF	2006/10/15 14:48
L81	3	((("6225142") or ("6189582") or ("6867425"))).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/10/15 14:48
L82	193	chalcogenide with memory and trench AND @PD>"20021031"	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L83	2314	((257/2,3,4,5,310,311,484) or (365/105)).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/10/15 14:48
L84	460	"3,271,591" "3,611,063" "3,343,034" "3,619,732" "3,571,669" "3,656,032" "3,571,670" "3,846,767" "3,571,671" "3,875,566" "3,571,672" "3,886,577" "3,588,638" "3,980,505"	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48

## EAST Search History

L85	3845109	forming	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	OFF	2006/10/15 14:48
L86	80834	forming with electrodes	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	OFF	2006/10/15 14:48
L87	493	L86 and chalcogenide	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L88	2110	forming with electrodes with (simultaneous simultaneously)	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	OFF	2006/10/15 14:48
L89	61328	(forming FORMED MAKING MADE PATTERNING PATTERNED) NEAR (simultaneous simultaneously)	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	OFF	2006/10/15 14:48
L90	3187	L89 WITH ELECTRODES	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	OFF	2006/10/15 14:48
L91	73	"5166758"	US-PGPUB	OR	OFF	2006/10/15 14:48
L92	72	"5166758" and phase	US-PGPUB	OR	OFF	2006/10/15 14:48
L93	9	((("6225142") or ("6189582") or ("5914893") or ("5933365") or ("6316784") or ("4203123") or ("6605821") or ("6867425") or ("20040178403"))).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/10/15 14:48
L94	3	((("6225142") or ("6189582") or ("6867425"))).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/10/15 14:48
L95	3	L94 and (substrate plane planar flat)	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L96	3	L94 and (substrate plane planar flat electrode phase adj change adj material)	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L97	3	L94 and (substrate plane planar flat) and electrode	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L98	3	L81 and trench and electrode	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L99	12	"4181913"	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48

## EAST Search History

L100	3	"4181913" and chalcogenide	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L101	5	"4181913" and PHASE	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L102	22	Tsukada and chalcogenide	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L103	61	L84 and trench	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L104	8	"276273".ap.	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L105	8	((("6031287") or ("6307264") or ("6064084") or ("6258707") or ("6423621") or ("5414271") or ("5687112") or ("5714768")).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/10/15 14:48
L106	8	"3440588"	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L107	15	"6087689"	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L108	3	L88 and chalcogenide	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L109	11	forming with (multiple near4 electrodes) with (simultaneous simultaneously)	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	OFF	2006/10/15 14:48
L110	30	HEON NEAR2 CHANG	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	OFF	2006/10/15 14:48
L111	11	HEON WITH YONG WITH CHANG	US-PGPUB; USPAT; EPO; IBM_TDB	OR	OFF	2006/10/15 14:48
L112	50	PHASE-CHANGE AND LOWREY AND TRENCH	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	ON	2006/10/15 14:48
L113	105	(PHASE-CHANGE OR MEMORY ADJ MATERIAL OR CHALCOGENIDE) AND LOWREY AND TRENCH	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	ON	2006/10/15 14:48

## EAST Search History

L114	10	((("5,296,716") or ("5,414,271") or ("5,359,205") or ("5,534,712") or ("5,341,328") or ("5,406,509") or ("5,534,711") or ("5,536,947") or ("5,687,112") or ("5,933,365"))).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/10/15 14:48
L115	87	"6031287" and electrode	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	OFF	2006/10/15 14:48
L116	86	"6031287" and electrode	US-PGPUB; USPAT; EPO; IBM_TDB	OR	OFF	2006/10/15 14:48
L117	126	"5166758" and (phase-change phase adj change) adj material	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L118	162	L82 AND ELECTRODE	US-PGPUB; USPAT	OR	ON	2006/10/15 14:48
L119	235	((257/2,3,4,5,310,311,484) or (365/105)).CCLS. and (trench via hole depression) and chalcogenide	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L120	114	forming with (TWO near4 electrodes) with (simultaneous simultaneously)	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	OFF	2006/10/15 14:48
L121	147	PHASE-CHANGE WITH MEMORY AND LOWREY	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	OFF	2006/10/15 14:48
L122	126	(PHASE-CHANGE OR MEMORY ADJ MATERIAL OR CHALCOGENIDE) AND ENERGY ADJ CONVERSION AND TRENCH	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	ON	2006/10/15 14:48
L123	241	chalcogenide with memory and trench	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L124	439	L88 and memory	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L125	604	(257/2,3,4,5).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/10/15 14:48
L126	1527	((257/2,3,4,5,310,311,484) or (365/105)).CCLS. and (trench via hole depression)	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48

## EAST Search History

L127	1367	(arsenic germanium) adj (telluride selenide sulphide sulfide disulfide disulphide trisulphide trisulfide)	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L128	30	arsenic sulfide with (chalcogenide or phase adj change)	US-PGPUB; USPAT	ADJ	OFF	2006/10/15 14:48
L129	335	arsenic sulfide	US-PGPUB; USPAT	ADJ	OFF	2006/10/15 14:48
L130	4	L129 and (phase\$1change or phase change) and electrode and optical	US-PGPUB; USPAT	ADJ	OFF	2006/10/15 14:48
L131	20	"4258109"	US-PGPUB; USPAT	ADJ	OFF	2006/10/15 14:48
L132	617	L127 and (electrode anode cathode)	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L133	88	L132 and horizontal	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L134	118	kozicki and horizontal	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L135	31	L134 and ion adj conductor	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L136	32	L134 and phase	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48
L137	15	L136 and L135	US-PGPUB; USPAT	OR	OFF	2006/10/15 14:48